

DT05 Rec'd PCT/PTO 2-8 SEP 2004

WO 03/083096

PCT/CA03/00409

## SEQUENCE LISTING

&lt;110&gt; Delaney, Allen

&lt;120&gt; Cancer Associated Protein Kinases and their Uses

&lt;130&gt; KINE-038prv

&lt;140&gt; not assigned

&lt;141&gt;

&lt;160&gt; 26

&lt;170&gt; FastSEQ for Windows Version 4.0

&lt;210&gt; 1

&lt;211&gt; 1242

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; misc\_feature

&lt;222&gt; (0)...(0)

&lt;223&gt; PCK3 kinase DNA

&lt;400&gt; 1

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&lt;210&gt; 2

&lt;211&gt; 380

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; UNSURE

&lt;222&gt; (0)...(0)

&lt;223&gt; PCK3 kinase polypeptide

&lt;400&gt; 2

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          20           25           30
Met Ser Arg Arg Ala Ser Leu Ser Asp Ile Gly Phe Gly Lys Leu Glu
      35           40           45
Thr Tyr Val Lys Leu Asp Lys Leu Gly Glu Gly Thr Tyr Ala Thr Val
      50           55           60
Phe Lys Gly Arg Ser Lys Leu Thr Glu Asn Leu Val Ala Leu Lys Glu
65           70           75           80
Ile Arg Leu Glu His Glu Glu Gly Ala Pro Cys Thr Ala Ile Arg Glu
          85           90           95
Val Ser Leu Leu Lys Asn Leu Lys His Ala Asn Ile Val Thr Leu His
          100          105          110
Asp Leu Ile His Thr Asp Arg Ser Leu Thr Leu Val Phe Glu Tyr Leu
          115          120          125
Asp Ser Asp Leu Lys Gln Tyr Leu Asp His Cys Gly Asn Leu Met Ser
          130          135          140
Met His Asn Val Lys Ile Phe Met Phe Gln Leu Leu Arg Gly Leu Ala
          145          150          155          160
Tyr Cys His Thr Arg Lys Ile Leu His Arg Asp Leu Lys Pro Gln Asn
          165          170          175
Leu Leu Ile Asn Glu Arg Gly Glu Leu Lys Leu Ala Asp Phe Gly Leu
          180          185          190
Ala Arg Ala Lys Ser Val Pro Thr Lys Thr Tyr Ser Asn Glu Val Val
          195          200          205
Thr Leu Trp Tyr Arg Pro Pro Asp Val Leu Leu Gly Ser Thr Glu Tyr
          210          215          220
Ser Thr Pro Ile Ala Met Trp Gly Val Gly Cys Ile His Tyr Glu Met
          225          230          235          240
Ala Thr Gly Arg Pro Leu Phe Pro Gly Ser Thr Val Lys Glu Glu Leu
          245          250          255
His Leu Ile Phe Arg Leu Leu Gly Thr Pro Thr Glu Glu Thr Trp Pro
          260          265          270
Gly Val Thr Ala Phe Ser Glu Phe Arg Thr Tyr Ser Phe Pro Cys Tyr
          275          280          285
Leu Pro Gln Pro Leu Ile Asn His Ala Pro Arg Leu Asp Thr Asp Gly
          290          295          300
Ile His Leu Leu Ser Ser Leu Leu Val Tyr Glu Ser Lys Ser Arg Met
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Ser Ala Glu Ala Ala Leu Ser His Ser Tyr Phe Arg Ser Leu Gly Glu
          325          330          335
Arg Val His Gln Leu Glu Asp Thr Ala Ser Ile Phe Ser Leu Lys Glu
          340          345          350
Ile Gln Leu Gln Lys Asp Pro Gly Tyr Arg Gly Leu Ala Phe Gln Gln
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&lt;210&gt; 3

&lt;211&gt; 4957

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; misc\_feature

&lt;222&gt; (0)...(0)

&lt;223&gt; PFTK1 kinase DNA

&lt;400&gt; 3

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&lt;210&gt; 4

&lt;211&gt; 451

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; UNSURE

&lt;222&gt; (0)...(0)

&lt;223&gt; PFTK1 kinase polypeptide

&lt;400&gt; 4

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Asn Cys Gln Gly Met Asp Ser Val Ile Lys Pro Leu Asp Thr Ile Pro
35          40          45
Glu Asp Lys Lys Val Arg Val Gln Arg Thr Gln Ser Thr Phe Asp Pro
50          55          60
Phe Glu Lys Pro Ala Asn Gln Val Lys Arg Val His Ser Glu Asn Asn
65          70          75          80
Ala Cys Ile Asn Phe Lys Thr Ser Ser Thr Gly Lys Glu Ser Pro Lys
85          90          95
Val Arg Arg His Ser Ser Pro Ser Ser Pro Thr Ser Pro Lys Phe Gly
100          105          110
Lys Ala Asp Ser Tyr Glu Lys Leu Glu Lys Leu Gly Glu Gly Ser Tyr
115          120          125
Ala Thr Val Tyr Lys Gly Lys Ser Lys Val Asn Gly Lys Leu Val Ala
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Leu Lys Val Ile Arg Leu Gln Glu Glu Glu Gly Thr Pro Phe Thr Ala
145          150          155          160
Ile Arg Glu Ala Ser Leu Leu Lys Gly Leu Lys His Ala Asn Ile Val
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Leu Leu His Asp Ile Ile His Thr Lys Glu Thr Leu Thr Leu Val Phe
180          185          190

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&lt;210&gt; 5

&lt;211&gt; 5451

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; misc\_binding

&lt;222&gt; (0)...(0)

&lt;223&gt; CRK7 kinase DNA sequence

&lt;400&gt; 5

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&lt;210&gt; 6

&lt;211&gt; 1490

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; UNSURE

&lt;222&gt; (0)...(0)

&lt;223&gt; CRK7 kinase polypeptide

&lt;400&gt; 6

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His His Gln His Arg Arg Ser Arg Asp Leu Leu Lys Ala Lys Gln Thr
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&lt;211&gt; 5792

&lt;212&gt; DNA

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&lt;223&gt; PRKCN kinase nucleotide

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&lt;210&gt; 8

&lt;211&gt; 890

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; UNSURE

&lt;222&gt; (0)...(0)

&lt;223&gt; PRKCN kinase polypeptide

&lt;400&gt; 8

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145          150          155          160
Ser Tyr Lys Ala Pro Thr Phe Cys Asp Tyr Cys Gly Glu Met Leu Trp
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Gly Leu Val Arg Gln Gly Leu Lys Cys Glu Gly Cys Gly Leu Asn Tyr
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&lt;210&gt; 9

&lt;211&gt; 5251

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; misc\_feature

&lt;222&gt; (0)...(0)

&lt;223&gt; CIT kinase nucleotide

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 20           25           30
Gln Ala Leu Lys Glu Gln Lys Leu Lys Ala Glu Ser Leu Ser Asp Lys
 35           40           45
Leu Asn Asp Leu Glu Lys Lys His Ala Met Leu Glu Met Asn Ala Arg
 50           55           60
Ser Leu Gln Gln Lys Leu Glu Thr Glu Arg Glu Leu Lys Gln Arg Leu
 65           70           75           80
Leu Glu Glu Gln Ala Lys Leu Gln Gln Gln Met Asp Leu Gln Lys Asn
 85           90           95
His Ile Phe Arg Leu Thr Gln Gly Leu Gln Glu Ala Leu Asp Arg Ala
100          105          110
Asp Leu Leu Lys Thr Glu Arg Ser Asp Leu Glu Tyr Gln Leu Glu Asn
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Ile Gln Val Leu Tyr Ser His Glu Lys Val Lys Met Glu Gly Thr Ile
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Ser Gln Gln Thr Lys Leu Ile Asp Phe Leu Gln Ala Lys Met Asp Gln
145          150          155          160
Pro Ala Lys Lys Lys Lys Val Pro Leu Gln Tyr Asn Glu Leu Lys Leu
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Ala Leu Glu Lys Glu Lys Ala Arg Cys Ala Glu Leu Glu Glu Ala Leu
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Asn Ile Pro His Arg Phe Asn Val Gly Leu Asn Met Arg Ala Thr Lys
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Cys Ala Val Cys Leu Asp Thr Val His Phe Gly Arg Gln Ala Ser Lys
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&lt;211&gt; 2033

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; misc\_feature

&lt;222&gt; (0)...(0)

&lt;223&gt; STK6 kinase nucleotide

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Lys	Ser	Lys	Gln	Pro	Leu	Pro	Ser	His	Leu	Lys	Ile	Ile	Leu	Arg	Arg
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Tyr	Lys	Arg	Ile	Ser	Arg	Val	Glu	Phe	Thr	Phe	Pro	Asp	Phe	Val	Thr
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 Gln Ser

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&lt;210&gt; 15

&lt;211&gt; 1776

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

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&lt;221&gt; misc\_feature

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&lt;223&gt; PAK4 kinase nucleotide

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&lt;211&gt; 591

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&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; UNSURE

&lt;222&gt; (0)...(0)

&lt;223&gt; PAK4 kinase polypeptide

&lt;400&gt; 16

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Arg Pro Lys Pro Leu Val Asp Pro Ala Cys Ile Thr Ser Ile Gln Pro
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 <213> Homo sapiens

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 <223> ITK kinase polypeptide

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 35 40 45  
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 Ile Val Lys Ser Asp Ile Ser Ile Pro Cys His Tyr Lys Tyr Pro Phe  
 65 70 75 80  
 Gln Val Val His Asp Asn Tyr Leu Leu Tyr Val Phe Ala Pro Asp Arg  
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 Glu Ser Arg Gln Arg Trp Val Leu Ala Leu Lys Glu Glu Thr Arg Asn  
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 Lys Trp Arg Cys Cys Ser Gln Leu Glu Lys Leu Ala Thr Gly Cys Ala  
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 Gln Tyr Asp Pro Thr Lys Asn Ala Ser Lys Lys Pro Leu Pro Pro Thr  
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 Pro Glu Asp Asn Arg Arg Pro Leu Trp Glu Pro Glu Glu Thr Val Val  
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 Ile Ala Leu Tyr Asp Tyr Gln Thr Asn Asp Pro Gln Glu Leu Ala Leu  
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 Trp Arg Val Gln Asp Arg Asn Gly His Glu Gly Tyr Val Pro Ser Ser  
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&lt;210&gt; 19

&lt;211&gt; 2604

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; misc\_feature

&lt;222&gt; (0)...(0)

&lt;223&gt; BMX kinase polynucleotide

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&lt;210&gt; 20

&lt;211&gt; 697

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; UNSURE

&lt;222&gt; (0)...(0)

&lt;223&gt; BMX kinase polypeptide

&lt;400&gt; 20

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&lt;210&gt; 21

&lt;211&gt; 3742

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; misc\_feature

&lt;222&gt; (0)...(0)

&lt;223&gt; PRKCM kinase polynucleotide

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attcttgtca aaaaaaaaaa aa 3742

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&lt;210&gt; 22

&lt;211&gt; 912

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; UNSURE

&lt;222&gt; (0)...(0)

&lt;223&gt; PRKCM kinase polypeptide

&lt;400&gt; 22

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Ala Ala Ala Ala Ala Ala Ala Ala Ala Ala Leu Val Pro Gly Ser Gly
          20          25          30
Pro Gly Pro Ala Pro Phe Leu Ala Pro Val Ala Ala Pro Val Gly Gly
      35          40          45
Ile Ser Phe His Leu Gln Ile Gly Leu Ser Arg Glu Pro Val Leu Leu
      50          55          60
Leu Gln Asp Ser Ser Gly Asp Tyr Ser Leu Ala His Val Arg Glu Met
      65          70          75          80
Ala Cys Ser Ile Val Asp Gln Lys Phe Pro Glu Cys Gly Phe Tyr Gly
          85          90          95
Met Tyr Asp Lys Ile Leu Leu Phe Arg His Asp Pro Thr Ser Glu Asn
      100         105         110
Ile Leu Gln Leu Val Lys Ala Ala Ser Asp Ile Gln Glu Gly Asp Leu
      115         120         125
Ile Glu Val Val Leu Ser Arg Ser Ala Thr Phe Glu Asp Phe Gln Ile
      130         135         140
Arg Pro His Ala Leu Phe Val His Ser Tyr Arg Ala Pro Ala Phe Cys
      145         150         155         160
Asp His Cys Gly Glu Met Leu Trp Gly Leu Val Arg Gln Gly Leu Lys
          165          170          175

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Cys Glu Gly Cys Gly Leu Asn Tyr His Lys Arg Cys Ala Phe Lys Ile  
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 Pro Asn Asn Cys Ser Gly Val Arg Arg Arg Arg Leu Ser Asn Val Ser  
 195 200 205  
 Leu Thr Gly Val Ser Thr Ile Arg Thr Ser Ser Ala Glu Leu Ser Thr  
 210 215 220  
 Ser Ala Pro Asp Glu Pro Leu Leu Gln Lys Ser Pro Ser Glu Ser Phe  
 225 230 235 240  
 Ile Gly Arg Glu Lys Arg Ser Asn Ser Gln Ser Tyr Ile Gly Arg Pro  
 245 250 255  
 Ile His Leu Asp Lys Ile Leu Met Ser Lys Val Lys Val Pro His Thr  
 260 265 270  
 Phe Val Ile His Ser Tyr Thr Arg Pro Thr Val Cys Gln Tyr Cys Lys  
 275 280 285  
 Lys Leu Leu Lys Gly Leu Phe Arg Gln Gly Leu Gln Cys Lys Asp Cys  
 290 295 300  
 Arg Phe Asn Cys His Lys Arg Cys Ala Pro Lys Val Pro Asn Asn Cys  
 305 310 315 320  
 Leu Gly Glu Val Thr Ile Asn Gly Asp Leu Leu Ser Pro Gly Ala Glu  
 325 330 335  
 Ser Asp Val Val Met Glu Glu Gly Ser Asp Asp Asn Asp Ser Glu Arg  
 340 345 350  
 Asn Ser Gly Leu Met Asp Asp Met Glu Glu Ala Met Val Gln Asp Ala  
 355 360 365  
 Glu Met Ala Met Ala Glu Cys Gln Asn Asp Ser Gly Glu Met Gln Asp  
 370 375 380  
 Pro Asp Pro Asp His Glu Asp Ala Asn Arg Thr Ile Ser Pro Ser Thr  
 385 390 395 400  
 Ser Asn Asn Ile Pro Leu Met Arg Val Val Gln Ser Val Lys His Thr  
 405 410 415  
 Lys Arg Lys Ser Ser Thr Val Met Lys Glu Gly Trp Met Val His Tyr  
 420 425 430  
 Thr Ser Lys Asp Thr Leu Arg Lys Arg His Tyr Trp Arg Leu Asp Ser  
 435 440 445  
 Lys Cys Ile Thr Leu Phe Gln Asn Asp Thr Gly Ser Arg Tyr Tyr Lys  
 450 455 460  
 Glu Ile Pro Leu Ser Glu Ile Leu Ser Leu Glu Pro Val Lys Thr Ser  
 465 470 475 480  
 Ala Leu Ile Pro Asn Gly Ala Asn Pro His Cys Phe Glu Ile Thr Thr  
 485 490 495  
 Ala Asn Val Val Tyr Tyr Val Gly Glu Asn Val Val Asn Pro Ser Ser  
 500 505 510  
 Pro Ser Pro Asn Asn Ser Val Leu Thr Ser Gly Val Gly Ala Asp Val  
 515 520 525  
 Ala Arg Met Trp Glu Ile Ala Ile Gln His Ala Leu Met Pro Val Ile  
 530 535 540  
 Pro Lys Gly Ser Ser Val Gly Thr Gly Thr Asn Leu His Arg Asp Ile  
 545 550 555 560  
 Ser Val Ser Ile Ser Val Ser Asn Cys Gln Ile Gln Glu Asn Val Asp  
 565 570 575  
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 Gln Phe Gly Ile Val Tyr Gly Gly Lys His Arg Lys Thr Gly Arg Asp  
 595 600 605  
 Val Ala Ile Lys Ile Ile Asp Lys Leu Arg Phe Pro Thr Lys Gln Glu  
 610 615 620  
 Ser Gln Leu Arg Asn Glu Val Ala Ile Leu Gln Asn Leu His His Pro  
 625 630 635 640  
 Gly Val Val Asn Leu Glu Cys Met Phe Glu Thr Pro Glu Arg Val Phe  
 645 650 655



Val Val Met Glu Lys Leu His Gly Asp Met Leu Glu Met Ile Leu Ser  
660 665 670  
Ser Glu Lys Gly Arg Leu Pro Glu His Ile Thr Lys Phe Leu Ile Thr  
675 680 685  
Gln Ile Leu Val Ala Leu Arg His Leu His Phe Lys Asn Ile Val His  
690 695 700  
Cys Asp Leu Lys Pro Glu Asn Val Leu Leu Ala Ser Ala Asp Pro Phe  
705 710 715 720  
Pro Gln Val Lys Leu Cys Asp Phe Gly Phe Ala Arg Ile Ile Gly Glu  
725 730 735  
Lys Ser Phe Arg Arg Ser Val Val Gly Thr Pro Ala Tyr Leu Ala Pro  
740 745 750  
Glu Val Leu Arg Asn Lys Gly Tyr Asn Arg Ser Leu Asp Met Trp Ser  
755 760 765  
Val Gly Val Ile Ile Tyr Val Ser Leu Ser Gly Thr Phe Pro Phe Asn  
770 775 780  
Glu Asp Glu Asp Ile His Asp Gln Ile Gln Asn Ala Ala Phe Met Tyr  
785 790 795 800  
Pro Pro Asn Pro Trp Lys Glu Ile Ser His Glu Ala Ile Asp Leu Ile  
805 810 815  
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820 825 830  
Thr Leu Ser His Pro Trp Leu Gln Asp Tyr Gln Thr Trp Leu Asp Leu  
835 840 845  
Arg Glu Leu Glu Cys Lys Ile Gly Glu Arg Tyr Ile Thr His Glu Ser  
850 855 860  
Asp Asp Leu Arg Trp Glu Lys Tyr Ala Gly Glu Gln Arg Leu Gln Tyr  
865 870 875 880  
Pro Thr His Leu Ile Asn Pro Ser Ala Ser His Ser Asp Thr Pro Glu  
885 890 895  
Thr Glu Glu Thr Glu Met Lys Ala Leu Gly Glu Arg Val Ser Ile Leu  
900 905 910

&lt;210&gt; 23

&lt;211&gt; 1597

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; misc\_feature

&lt;222&gt; (0)...(0)

&lt;223&gt; NEK6 kinase polynucleotide

&lt;400&gt; 23

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&lt;210&gt; 24

&lt;211&gt; 306

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; UNSURE

&lt;222&gt; (0) ... (0)

&lt;223&gt; NEK6 kinase polypeptide

&lt;400&gt; 24

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20          25          30
Cys Ser Leu Ala Asp Phe Gln Ile Glu Lys Lys Ile Gly Arg Gly Gln
35          40          45
Phe Ser Glu Val Tyr Lys Ala Thr Cys Leu Leu Asp Arg Lys Thr Val
50          55          60
Ala Leu Lys Lys Val Gln Ile Phe Glu Met Met Asp Ala Lys Ala Arg
65          70          75          80
Gln Asp Cys Val Lys Glu Ile Gly Leu Leu Lys Gln Leu Asn His Pro
85          90          95
Asn Ile Ile Lys Tyr Leu Asp Ser Phe Ile Glu Asp Asn Glu Leu Asn
100         105         110
Ile Val Leu Glu Leu Ala Asp Ala Gly Asp Leu Ser Gln Met Ile Lys
115         120         125
Tyr Phe Lys Lys Gln Lys Arg Leu Ile Pro Glu Arg Thr Val Trp Lys
130         135         140
Tyr Phe Val Gln Leu Cys Ser Ala Val Glu His Met His Ser Arg Arg
145         150         155         160
Val Met His Arg Asp Ile Lys Pro Ala Asn Val Phe Ile Thr Ala Thr
165         170         175
Gly Val Val Lys Leu Gly Asp Leu Gly Leu Gly Arg Phe Phe Ser Ser
180         185         190
Glu Thr Thr Ala Ala His Ser Leu Val Gly Thr Pro Tyr Tyr Met Ser
195         200         205
Pro Glu Arg Ile His Glu Asn Gly Tyr Asn Phe Lys Ser Asp Ile Trp
210         215         220
Ser Leu Gly Cys Leu Leu Tyr Glu Met Ala Ala Leu Gln Ser Pro Phe
225         230         235         240
Tyr Gly Asp Lys Met Asn Leu Phe Ser Leu Cys Gln Lys Ile Glu Gln
245         250         255
Cys Asp Tyr Pro Pro Leu Pro Gly Glu His Tyr Ser Glu Lys Leu Arg
260         265         270
Glu Leu Val Ser Met Cys Ile Cys Pro Asp Pro His Gln Arg Pro Asp
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 Ser Thr  
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 <213> Homo sapiens  
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 <223> PDPK1 kinase polynucleotide

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 agaggcgaa acctgcagc atttttattt 1890

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 <211> 556  
 <212> PRT  
 <213> Homo sapiens

<220>  
 <221> UNSURE  
 <222> (0)...(0)  
 <223> PDPK1 kinase polypeptide

&lt;400&gt; 26

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Met Ala Arg Thr Thr Ser Gln Leu Tyr Asp Ala Val Pro Ile Gln Ser
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          20          25          30
Thr Glu Ser Ser Thr Pro Pro Gly Ile Pro Gly Gly Ser Arg Gln Gly
          35          40          45
Pro Ala Met Asp Gly Thr Ala Ala Glu Pro Arg Pro Gly Ala Gly Ser
          50          55          60
Leu Gln His Ala Gln Pro Pro Gln Pro Arg Lys Lys Arg Pro Glu
65          70          75          80
Asp Phe Lys Phe Gly Lys Ile Leu Gly Glu Gly Ser Phe Ser Thr Val
          85          90          95
Val Leu Ala Arg Glu Leu Ala Thr Ser Arg Glu Tyr Ala Ile Lys Ile
          100          105          110
Leu Glu Lys Arg His Ile Ile Lys Glu Asn Lys Val Pro Tyr Val Thr
          115          120          125
Arg Glu Arg Asp Val Met Ser Arg Leu Asp His Pro Phe Phe Val Lys
          130          135          140
Leu Tyr Phe Thr Phe Gln Asp Asp Glu Lys Leu Tyr Phe Gly Leu Ser
145          150          155          160
Tyr Ala Lys Asn Gly Glu Leu Leu Lys Tyr Ile Arg Lys Ile Gly Ser
          165          170          175
Phe Asp Glu Thr Cys Thr Arg Phe Tyr Thr Ala Glu Ile Val Ser Ala
          180          185          190
Leu Glu Tyr Leu His Gly Lys Gly Ile Ile His Arg Asp Leu Lys Pro
          195          200          205
Glu Asn Ile Leu Leu Asn Glu Asp Met His Ile Gln Ile Thr Asp Phe
          210          215          220
Gly Thr Ala Lys Val Leu Ser Pro Glu Ser Lys Gln Ala Arg Ala Asn
225          230          235          240
Ser Phe Val Gly Thr Ala Gln Tyr Val Ser Pro Glu Leu Leu Thr Glu
          245          250          255
Lys Ser Ala Cys Lys Ser Ser Asp Leu Trp Ala Leu Gly Cys Ile Ile
          260          265          270
Tyr Gln Leu Val Ala Gly Leu Pro Phe Arg Ala Gly Asn Glu Tyr
          275          280          285
Leu Ile Phe Gln Lys Ile Ile Lys Leu Glu Tyr Asp Phe Pro Glu Lys
          290          295          300
Phe Phe Pro Lys Ala Arg Asp Leu Val Glu Lys Leu Leu Val Leu Asp
305          310          315          320
Ala Thr Lys Arg Leu Gly Cys Glu Glu Met Glu Gly Tyr Gly Pro Leu
          325          330          335
Lys Ala His Pro Phe Phe Glu Ser Val Thr Trp Glu Asn Leu His Gln
          340          345          350
Gln Thr Pro Pro Lys Leu Thr Ala Tyr Leu Pro Ala Met Ser Glu Asp
          355          360          365
Asp Glu Asp Cys Tyr Gly Asn Tyr Asp Asn Leu Leu Ser Gln Phe Gly
          370          375          380
Cys Met Gln Val Ser Ser Ser Ser Ser Ser His Ser Leu Ser Ala Ser
385          390          395          400
Asp Thr Gly Leu Pro Gln Arg Ser Gly Ser Asn Ile Glu Gln Tyr Ile
          405          410          415
His Asp Leu Asp Ser Asn Ser Phe Glu Leu Asp Leu Gln Phe Ser Glu
          420          425          430
Asp Glu Lys Arg Leu Leu Leu Glu Lys Gln Ala Gly Gly Asn Pro Trp
          435          440          445
His Gln Phe Val Glu Asn Asn Leu Ile Leu Lys Met Gly Pro Val Asp
          450          455          460
Lys Arg Lys Gly Leu Phe Ala Arg Arg Arg Gln Leu Leu Leu Thr Glu
465          470          475          480

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WO 03/083096

PCT/CA03/00409

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			500					505					510		
Thr	Phe	Phe	Val	His	Thr	Pro	Asn	Arg	Thr	Tyr	Tyr	Leu	Met	Asp	Pro
		515					520					525			
Ser	Gly	Asn	Ala	His	Lys	Trp	Cys	Arg	Lys	Ile	Gln	Glu	Val	Trp	Arg
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Gln	Arg	Tyr	Gln	Ser	His	Pro	Asp	Ala	Ala	Val	Gln				
545					550					555					

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